

TOP SECRET**PRIORITY**P 312118Z
FM NPIC31 JUL 70 21 51 25X1
25X1AFSSO PACAF
AFSSO ACIC
AFSSO FTD
AFSSO USAFE
CNO
OPCEN
FICFUR

OUT: 70320

ZEM
TOP SECRET TTTTT CITE NPIC 895925X1
25X1
25X1

ALSO FOR 544 ARTW.

SUBJECT: CAMERA INFORMATION FOR MISSION 1111-1.

1. THE MISSION UTILIZED TWO PAN CAMERAS, FOUR HORIZON CAMERAS,
DUAL STELLAR CAMERAS AND AN INDEX CAMERA.

2. CAMERA DATA

A. MAIN UNITS

FOCAL LENGTHS (MM)	PAN CAMERAS	PORT HORIZONS	STBD HORIZONS	DISTRIBUTION
FWD	609.5416	55.156	55.030	CY OFFICE PI
AFT	609.5619	54.981	55.015	

FILTERS

PAN FWD	PRIMARY	W-25
PAN FWD	ALTERNATE	W-25
PAN AFT	PRIMARY	W-21
PAN AFT	ALTERNATE	W-21
FWD STBD	HORIZON	W-25
FWD PORT	HORIZON	W-25
AFT STBD	HORIZON	W-25
AFT PORT	HORIZON	W-25

FILE
2 CABLE SEC.
PP&B/RD
SECUR
3 TSSG/APSD
PSG/OC
4 RRD/DAS
REFRO
AID
IEG
IEG/OD
SCIEN
WEST
EAST
M&S
IEG/PHD
IAS
DIA-XX4
SPAD
DIA-AP

APERTURE

STBD HORIZON	F/8.0
PORT HORIZON	F/6.3

FILM

FWD	3414
AFT	3414

DYNAMIC RESOLUTION

FWD HIGH CONTRAST	285
FWD LOW CONTRAST	185
AFT HIGH CONTRAST	253
AFT HIGH CONTRAST	149

UNIT NUMBER FWD 325 AFT 324

B. DISIC UNIT NO. 2R

FOCAL LENGTHS (MM)	PORt STELLAR	STBD STELLAR	INDEX
FWD	76.126	75.971	76.322
FILTER (WRATTEN)	NONE	NONE	W-12
EXPOSURE (SEC)	1.5	1.5	1/500
FILM	3401	3401	3400

ADVANCE CY
SANITIZED
WITH TEXT

3. LENS DISTORTION (PIN CUSHION) (MM)

A. MAIN UNITS

ANGLE OF AXIS (DEG)	3	2	1	0	359	358	357
FWD	.002	.001	0	0	0	.002	.003

25X1

TOP SECRET

-2-

	AFT	.001	0	0	0	0	.002	.005
	FWD PORT	FWD	STBD	AFT PORT	AFT	STBD		
RADIAL 10 DEG		.0		.01	.005	.01		
20 DEG		.03		.03	.03	.05		
TANGENTIAL		.012		.012	.025	.018		

4. CAMERA ANGLES

A. ANGLE BETWEEN PAN CAMERAS 30 DEG 34 MIN 14.69 SEC
 B. DEPRESSION ANGLES BETWEEN HORIZONS AND PAN CAMERAS
 FWD PORT 15 DEG 05 MIN 02.38 SEC
 FWD STBD 15 DEG 11 MIN 33.09 SEC
 AFT PORT 15 DEG 01 MIN 40.21 SEC
 AFT STBD 15 DEG 10 MIN 09.69 SEC
 C. ANGLES STELLAR AND INDEX CAMERA
 STBD STELLAR AND INDEX 100 DEG 01 MIN 46.9182 SEC
 PORT STELLAR AND INDEX .99 DEG 56 MIN 22.0301 SEC

5. TIMING MARKS

FREQUENCY MARKS WILL APPEAR ON THE FILM AT A RATE OF 200 CYCLES PER SECOND.

6. IMAGE MOTION COMPENSATION DATA

PASSES	REF LEVEL	AMP LEVEL
1D,3A THRU 4A,5	2	11
6A THRU 10A		
16A THRU 20A,25D	1	8
31A THRU 36A,41D,45D		
81A THRU 83A,85D THRU		
88D		
47A,52A,52D	2	7
53D THRU 55D,63A,63D,	2	8
64A THRU 68A, 69M,70D		
THRU 77D,79A		
94A,94D,95A,97A	1	9

FOR ALL PASSES PRIMARY PERIOD 3548 SECONDS, SECONDARY PERIOD 2622
 SECONDARY RAMP FACTOR 0.017450

7. PROGRAM TIME DATA

CAMERA (ZULU TIME)	PROGRAM ON TIME UP RAMP	PROGRAM DURATION				
PASS	DAY	HR	MIN	SEC	SEC	
1D	23	02	53	51	1819	31
3A	23	05	37	58	888	237
4A1	23	07	07	06	847	228
4A2	23	07	12	01	1143	185
5M	23	08	42	40	1190	392
6A	23	10	11	32	1178	82
7A	23	11	45	15	1396	103
10A	23	16	04	52	748	64
16A	24	01	07	15	848	64
17A1	24	02	37	21	846	109
17A2	24	02	41	33	1099	94
18A1	24	04	08	19	897	123
18A2	24	04	11	40	1098	132
19A	24	05	40	28	1021	205
20A1	24	07	07	51	858	101
20A2	24	07	13	35	1202	141
25D	24	15	01	00	2217	152
31A	24	23	39	24	893	59
32A	25	01	08	45	848	51
33A	25	02	42	04	1042	158
34A	25	04	10	08	922	48
35A	25	05	39	54	918	133

-3-

36A1	25	07 09	57	916	53
36A2	25	07 11	48	1028	276
41D	25	15 02	26	2252	147
45D	25	20 58	52	2000	64
47A	25	23 39	40	877	40
52A	26	07 14	11	1144	141
52D	26	07 28	47	2020	68
53D	26	07 01	01	2152	42
54D	26	10 23	59	1731	80
55D	26	11 58	59	2031	39
63A	26	23 35	55	660	181
63D	26	23 59	38	2083	38
64A	27	01 08	23	810	64
65A	27	02 41	02	971	58
66A1	27	04 09	11	862	93
66A2	27	04 12	00	1031	68
67A	27	05 40	46	961	117
68A	27	07 14	18	1175	130
69M	27	08 46	19	1299	222
69D	27	08 54	41	1801	60
70D1	27	10 19	58	1519	150
70D2	27	10 27	27	1969	130
71D	27	11 55	39	1866	34
72D1	27	13 26	24	1915	52
72D2	27	13 30	05	2135	111
77D	27	20 57	54	2027	46
79A	27	23 36	37	759	103
81A1	28	02 36	40	746	47
81A2	28	02 40	38	984	102
82A1	28	04 07	36	793	68
82A2	28	04 11	12	1010	92
83A	28	05 41	40	1029	129
85D1	28	08 52	03	1635	70
85D2	28	08 55	10	1821	64
86D	28	10 26	16	1880	60
88D1	28	13 27	36	1944	46
88D2	28	13 31	23	2171	105
94A	28	22 03	42	468	43
94D	28	22 26	49	1855	39
95A	28	23 37	26	686	69
97A1	29	02 38	30	737	90
97A2	29	02 41	34	922	81
97A3	29	02 44	58	1125	70

8. TIME CORRELATION (MILLISECONDS)

PASS	CLOCK TIME	SYSTEM TIME	DIFFERENCE
10	18093.968	57645.8283	----
15	46646.265	86198.1187	.007
26	104616.103	57767.9423	.014
31	133349.600	101.3318	.108
41	185663.967	52415.7844	.010
47	219539.807	86291.6145	.010
57	272016.625	52368.4165	.016
63	305956.759	86308.5397	.011
73	358355.279	52307.0421	.018
79	392335.517	86287.2683	.012
89	444823.405	52375.1372	.019
95	478867.445	19.1643	.013
104	525922.016	47073.7168	.019

NOTE: ALL "DIFFERENCE" VALUES ARE PLUS.

TOP SECRET

END OF MESSAGE

GROUP ONE